

AMENDMENTS TO THE SPECIFICATION:

Change(s) applied to document,
/K.M.B./
10/31/2011

Please amend paragraph [0161] as follows:

With reference to FIGS. 12, 16-19 and 21, the CS Platform 115 can preferably take the form of a networked, embedded personal computer. Additionally, the add-on component can take the form of a headless box. In whatever particular form, the add-on component 115 is connected to the IOT via at least one physical interface. The VI for the CS Platform 115 is available at any browser on the local network and is served by an embedded web server 130 in the CS Platform 115. In a preferred embodiment the user would use the browser on their DFE as the local VI for the CS Platform 115. The CS Platform 115 is preferably networked and configured, just as any browser is configured, to know the local network proxies, firewall passwords, DNS server IP addresses, and so forth, so that it can connect to the edge server 410 server which is available on the Internet 400. When running, the CS Platform 115 will use this connection to check for messages and instructions and will send required data in support of subscribed services 140 as well. The edge server 410 server manages the queues, messages, services, and transactions associated with the end-to-end operation of the device services.

Please amend paragraph [0182] as follows:

The CS Platform is configured for the network just as any browser would be configured. This can be done manually via form fill-in on the CS Platform VI. It can also be done through a look-up to see the setting already found in the web browser platform if the OS provides that capability. This would provide the base-line settings and the user then has the ability to customize or correct them as necessary.

Once configured, a Test Configuration button can be provided that immediately tries to contact the supplier edge server 410 server to ensure that the settings are correct before the user leaves the network administration page.

from the first three months of its operation in the field. The exact nature and behavior of this service could not have been anticipated when the product was launched, so the diagnostic service would not have been included in the launched product. Embodiments allow such a diagnostic service to be added to installed devices at substantially any time.

Please replace the last sentence of paragraph [0144] with the following amended sentence.

[0144] Another variant in deployment is to fully embed the DMA into the product itself. This implementation is in a way very similar to the Example 1 implementation in that they are both DMA enabled platforms. For this example however, the small footprint DMA services platform is embedded into the product and communicates with both a Print Station Interface Platform (PSIP) and with an embedded device controller. The limited resources required by the small footprint system is acceptable to that product and development and integration of the required interface components ~~is~~are relatively easy.

Please replace paragraph [0153] with the following amended paragraph:

[0153] All options are attractive because as a group they can provide additional flexibility for deployments that will meet a variety of user requirements. The preferred method of connecting, when feasible, is Option A - Wired connectivity via LAN and Internet. This is the option of least development investment and least operation expense. In the short-term this is especially important while the value of the services ~~are~~is being proven and resources need to be focused on initial services development and delivery — not additional ways to connect to devices. It does not, however, address unconnected devices that will initially be left out of the services if only this option is pursued. For the time being each service will need to consider how to manually include non-connected devices in the offerings.

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Please replace paragraph [01~~53~~⁸⁷] with the following amended paragraph:

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diagnostic routines, on the device 110 as directed by internal or external clients or users. This moves device specific processing closer to the device 110 from a centralized application server 320. The role of the applications server 320 transforms from a ~~compute-computer~~ platform for execution of applications/services to the management and configuration of applications/services 140. Thus, devices 110 become active participants in the process, as opposed to being passive data repositories in strict client/server architectures.

Please replace paragraph [0068] with the following amended paragraph:

[0068] The DMA 120 according to embodiments can also perform dynamic updates of services 140 and support components operating within the end-to-end DCS platform 1. Devices 110 that employ the DMA 120 can add new service components 140 dynamically. It allows a user or application component already on the device 110 to request such additions to support services 140. It can also allow the addition or deletion of components as needed and without system or DMA recompilation or restart. In embodiments, the target device 110 itself initiates the additions of a new or upgraded service as a whole or as supporting components for existing services. Thus, in the system 1 described herein, the device 110 can now be responsible for initiating the activity to maintain itself and system management services running on it.

Please replace paragraph [0072] with the following amended paragraph:

[0072] Alternatively, the DMA 120 can be embedded in a specialized hardware device or add-on component 115 to devices 110 that are standalone, such as copiers, or for existing devices in field that are not able to ran the DMA 120. Such add-on components 115 are shown schematically in ~~FIGS. 12, 16, and 17~~FIGS. 12, 17 and 18, and will be discussed in more detail below.

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Please replace paragraph [0092] with the following amended paragraph:

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